

MICROWAVE TREATMENT OF ORES

ABSTRACT OF THE DISCLOSURE

A method of treating ore particles to facilitate subsequent processing of the ore particles to recover valuable components from the ore is disclosed. The method includes exposing the ore particles to microwave energy and causing structural alteration of the ore particles. In one embodiment structural alteration is achieved without significantly altering the mineralogy, i.e., composition, of the ore. In another embodiment structural alteration is achieved with minimal change to the sizes of the ore particles. In another embodiment the method includes exposing the ore particles to short duration, high energy pulses of microwave energy.